

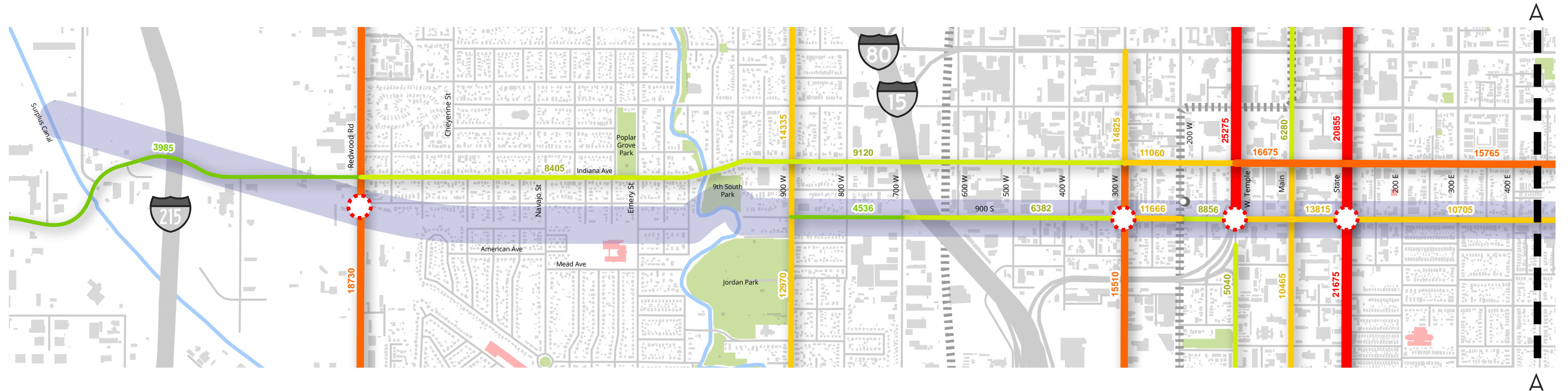
## EXISTING CONDITIONS ANALYSIS

The 9-Line Extension is a complex and multi-faceted project involving coordination with many realms including planning, transportation, parks, and engineering. A broad analysis of existing conditions was developed to respond to the multiple project objectives and provide a solid foundation for the development of recommendations and alternatives. Traffic volumes, existing and planned transit, existing/future bicycling and walking routes, destinations, ongoing projects, and existing street configurations were all analyzed to inform the plan's recommendations.



Existing 9-Line Trail west of I-15

# EXISTING TRAFFIC VOLUMES



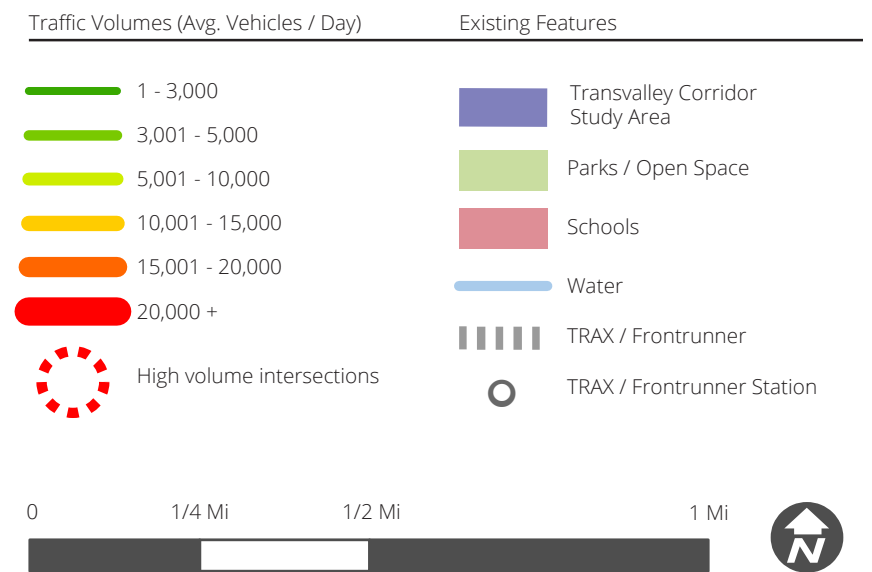
## Traffic Volume Analysis

Traffic volumes along the 9-Line Extension corridor vary significantly. Traffic volumes range between 4,500 and 14,000 ADT with the highest volumes occurring along Sunnyside Ave. and between West Temple and State St.

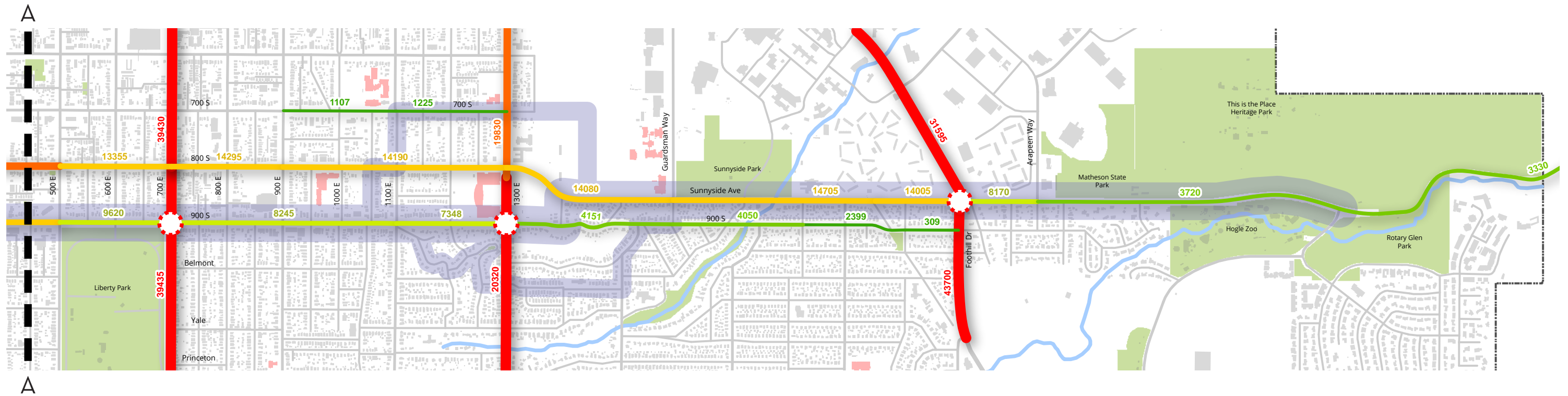
Additionally, the 9-Line Extension crosses several high volume roadways that present challenges in developing a safe and comfortable bicycling and walking corridor for all ages and abilities. Special treatments should be considered at these intersections to mitigate the speed and volume of motor vehicle traffic along the cross street. Treatments could include median refuges, curb extensions, leading pedestrian interval signal phasing, hybrid beacons (at mid-block locations), or even grade-separated crossings.

High-volume intersections include:

- Redwood Rd.
- 300 West
- West Temple
- State St.
- 700 E
- 1300 E
- Foothill Dr.







900 South west of 300 W carries a relatively low 6,400 cars per day

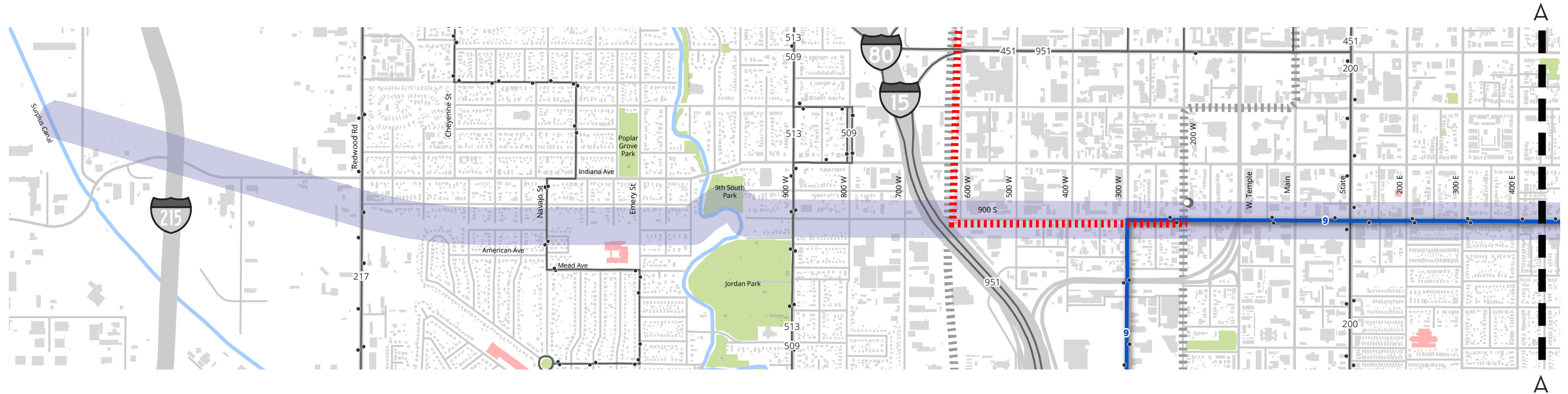


900 South near Liberty Park carries about 10,000 cars per day



700 East near Liberty Park carries nearly 40,000 cars per day

# EXISTING & PLANNED TRANSIT



## MULTI-MODAL INTEGRATION

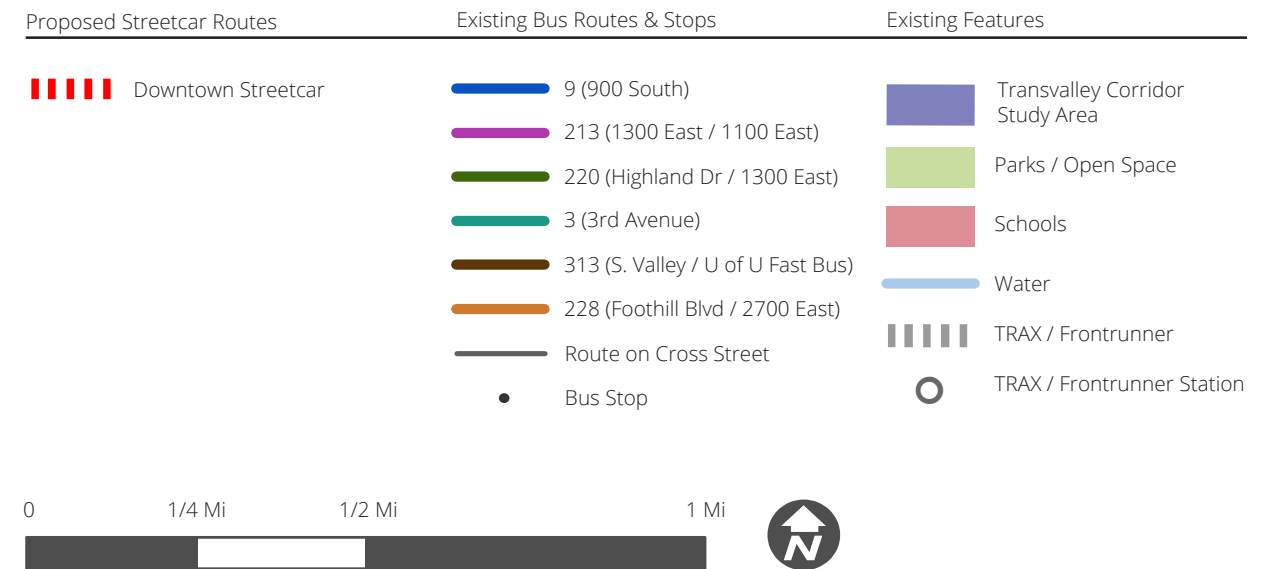
Integration of bicycling, walking, and streetscape improvements with rail and bus transit service will be a critical component of the success of the 9-Line Extension. Comfortable and convenient bicycling and walking facilities and supporting infrastructure contribute to first/last mile connectivity and improve ridership. UTA's First / Last Mile Strategies study suggested that active transportation improvements, along with other first/last mile strategies could improve transit ridership 3-6%.

In addition to providing connections to transit, the 9-Line Extension Plan will need to coordinate proposed designs with passenger boarding areas. Bus pullouts or other design strategies may also be needed if changes to the roadway are proposed.

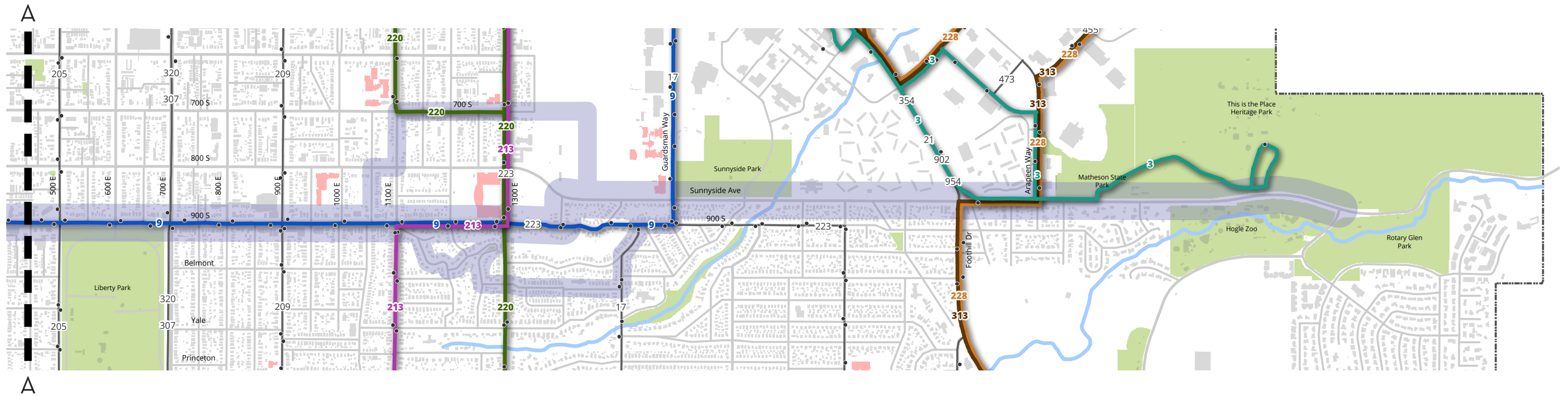
## FUTURE TRANSIT

The Downtown Streetcar route indicated in the map above, depicts the preliminary alignment of a route connecting the Central Ninth TRAX Station to Downtown Salt Lake City. Preliminary plans call for the streetcar to be routed in existing travel lanes along 900 S so no additional ROW would be required. The future streetcar would provide an additional transit connection to Downtown that could be easily accessed by the 9-Line.

In addition to the planned streetcar route, Salt Lake City is also currently developing a Transit Master Plan which may alter the configuration of existing and future transit service elsewhere throughout the corridor.







900 South TRAX (light rail) station at the Central 9th Commercial Node

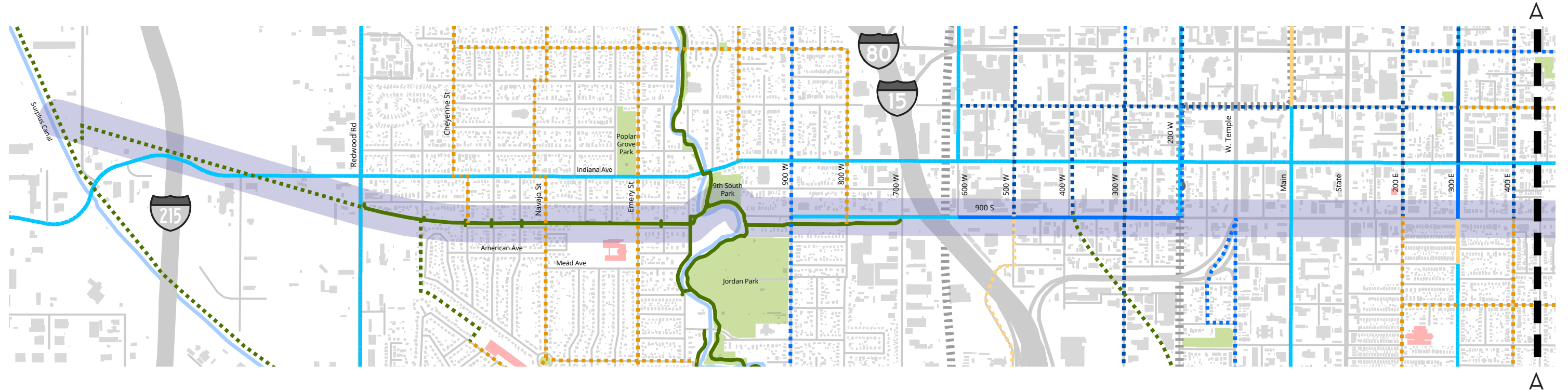


Bus stop on Route 9 near Main Street



Bus stop on Route 9 near 300 E

# EXISTING & PLANNED BICYCLING & WALKING FACILITIES

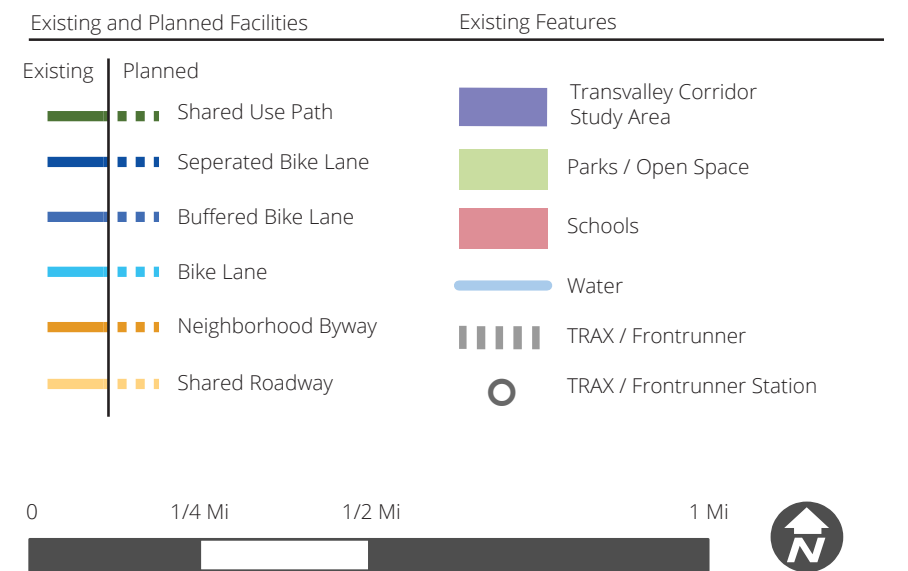


## WALKING AND BICYCLING NETWORK

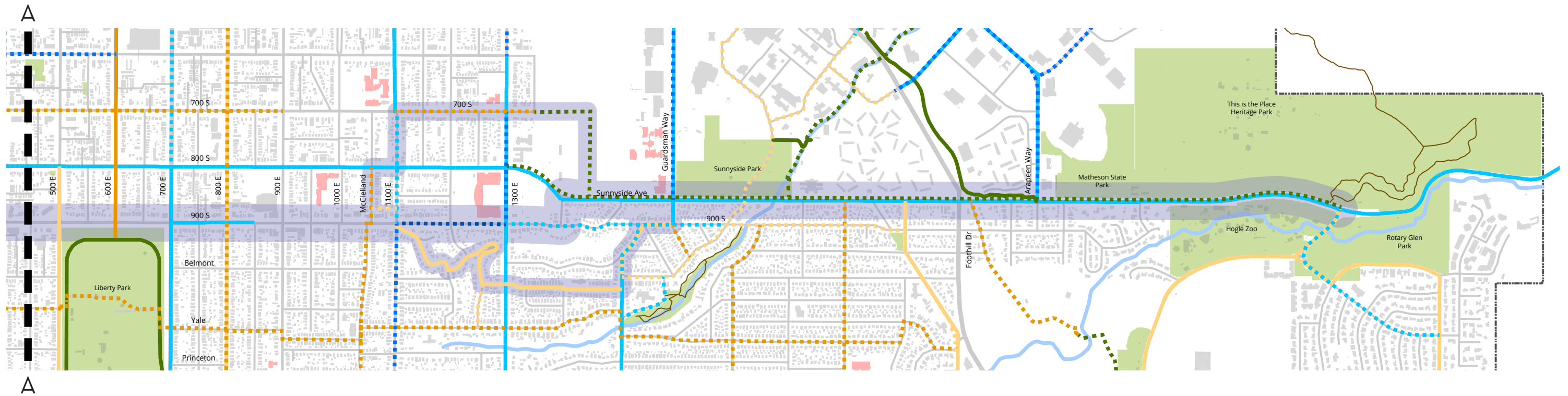
The 9-Line Extension fills a valuable role in the overall bicycle and pedestrian network for Salt Lake City. As one of the few continuous east-west routes in all of Salt Lake County, the 9-Line corridor offers the potential to link to several existing bicycling and walking facilities of regional importance including the Jordan River Trail, the 600 E Neighborhood Byway, the McClelland Trail, the Bonneville Shoreline Trail, and Emigration Canyon. The 9-Line Corridor is also one of 10 potential east-west trail corridors identified in the Salt Lake County East-West Trails Master Plan.

Many future facilities are also planned throughout the corridor and represent important connections that should be considered in the design of the 9-Line Extension. The Surplus Canal on the west end of the project corridor will provide an important low-stress bicycle and pedestrian connection to the Salt Lake City Airport. Neighborhood byways planned at Cheyenne St., Navajo St., Emery St. and 800 E offer additional low-stress north-south connections. The Granary Trail is a planned rail-to-trail corridor near 400 W that will connect Central Ninth to the Smith's Ballpark area. Finally, a planned neighborhood byway along Connor St. connecting to a shared use path through Bonneville Golf Course will provide a critical connection from Wasatch Boulevard and points south to the

University of Utah and Research Park. Conceptual design at Sunnyside Ave. and Connor St. should consider how to safely route bicyclists and pedestrians across Sunnyside.







Existing 9 Line Trail a block east of Redwood Rd, looking east



The 600 East Neighborhood Byway prioritizes pedestrians and bicyclists crossing 900 South north of Liberty Park and reduces through vehicle traffic



Shared lane markings on Gilmer Dr between 1100 East and 1500 East direct bicyclists to use a less steep route than riding straight up or down 900 South



# DESTINATIONS & ON-GOING PROJECTS



## DESTINATIONS & ONGOING PROJECTS

One of the many strengths of the 9-Line Extension corridor is the project area's numerous and diverse destinations. The project links many of Salt Lake City's most popular recreational assets such as the Jordan River Trail, Jordan Park, Liberty Park, Matheson State Park, and the Bonneville Shoreline Trail. Linking these recreational amenities with comfortable bicycling and walking facilities will improve community access to recreation, promote community health, and promote the concept of 900 S as part of a "Green Loop" consistent with the Downtown Plan.

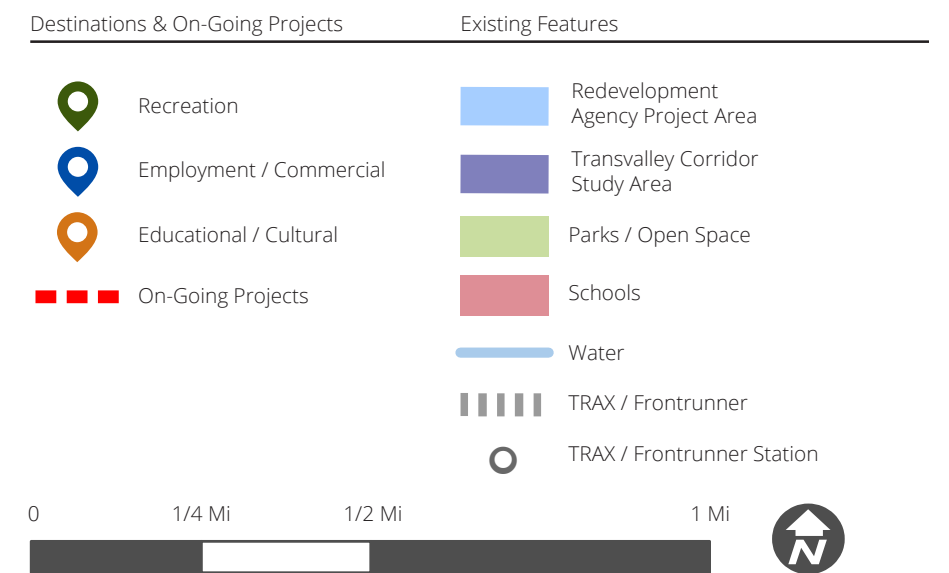
The 9 Line Extension Corridor also links three planned or existing neighborhood commercial nodes. These nodes include 9 & 9th West, Central Ninth, and 9th & 9th East. Connecting these commercial nodes will allow developing business nodes, such as 9th & 9th West, to leverage the success of more established business districts along the corridor.

A number of cultural destinations also exist throughout the corridor. By in large, many of these destinations such as This is the Place Heritage Park, Utah's Hogle Zoo, Matheson State Park are located in the East Bench. Connectivity to these destinations could

provide visitors a new way to experience each destination. Opportunities for interpretive signage could also be incorporated with the future trail.

## ONGOING PROJECTS

A number of exciting projects are underway throughout the corridor that could provide opportunities for synergy with the 9-Line Extension. First, the RDA recently announced the creation of two new redevelopment project areas along the existing 9-Line Trail and State St. Second, the RDA has designated funding for streetscape improvements in the Central Ninth area from 300 W to West Temple. Salt Lake City Transportation is also currently working on design and engineering of the McClelland Trail which will provide one option to navigate the challenging topography climbing up to the East Bench.





900 South Constructed Wetlands beautification improvements were made to the previously empty area between the 9 Line and 900 South west of 900 West in 2014



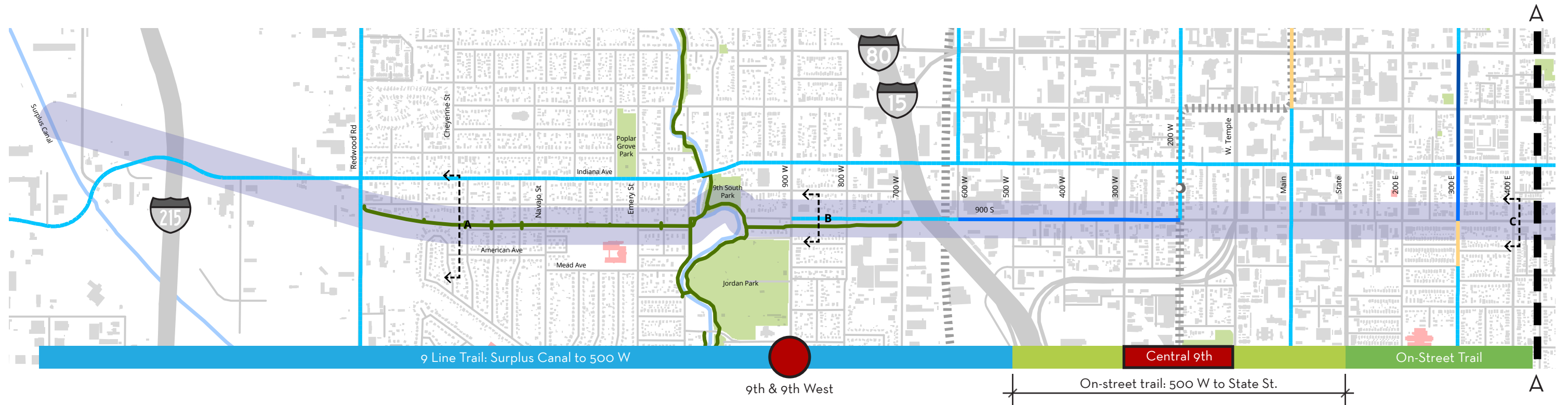
Pump track on 900 South near the I-15 overpass



Streetside amenities like outdoor dining, bike racks, and angled parking at the 9th & 9th East Commercial Node

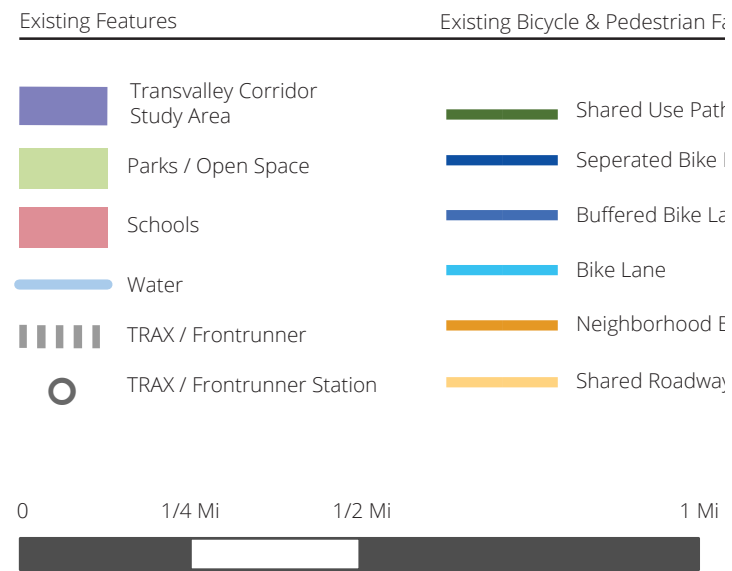


# CORRIDOR SEGMENTS & CROSS-SECTIONS



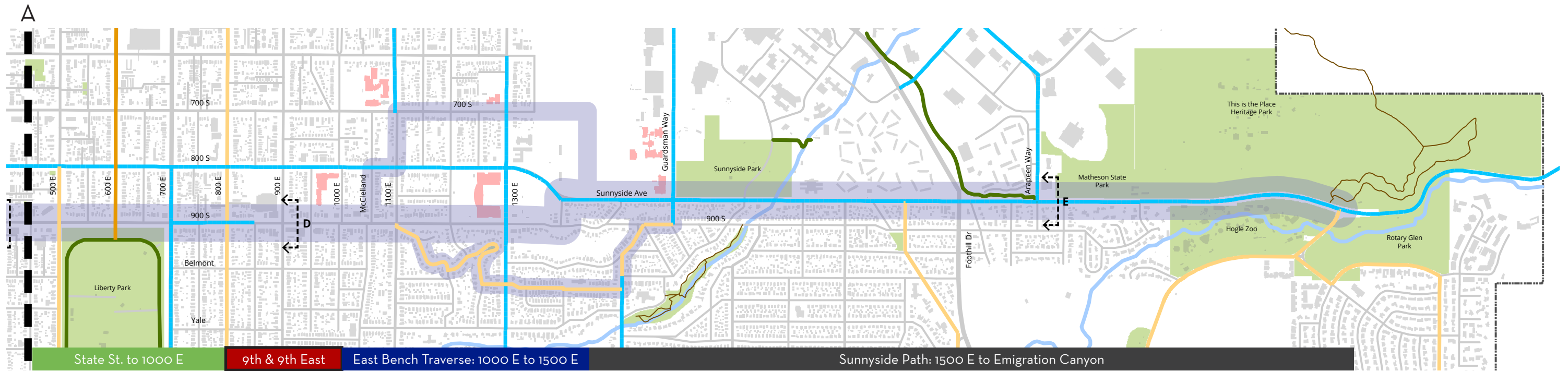
## CORRIDOR SEGMENTS & CROSS-SECTIONS

Based upon a number of factors including land use, ROW widths, street configuration, on-street parking, and topography, the Project Team divided the corridor into five segments which shared similar characteristics. Existing and planned commercial nodes at 9 & 9th West, Central Ninth, and 9th & 9th East were also categorized separately based upon the unique land use, on-street parking needs, and urban form of these areas.



Existing 9-Line Trail at Redwood Rd.





900 S at 300 W, existing buffered bike lane



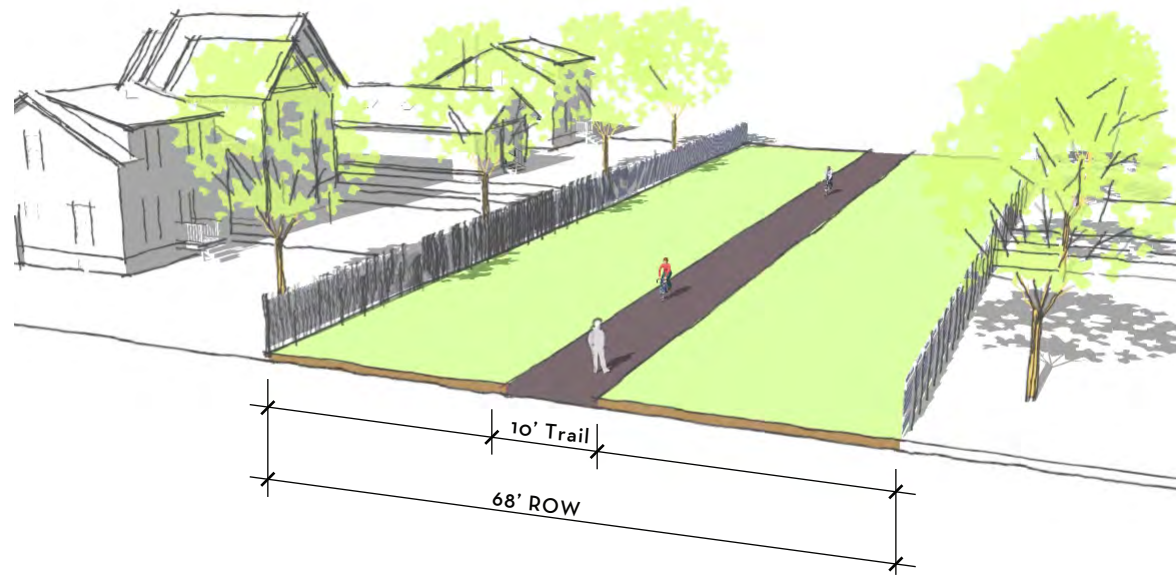
900 S at Liberty Park



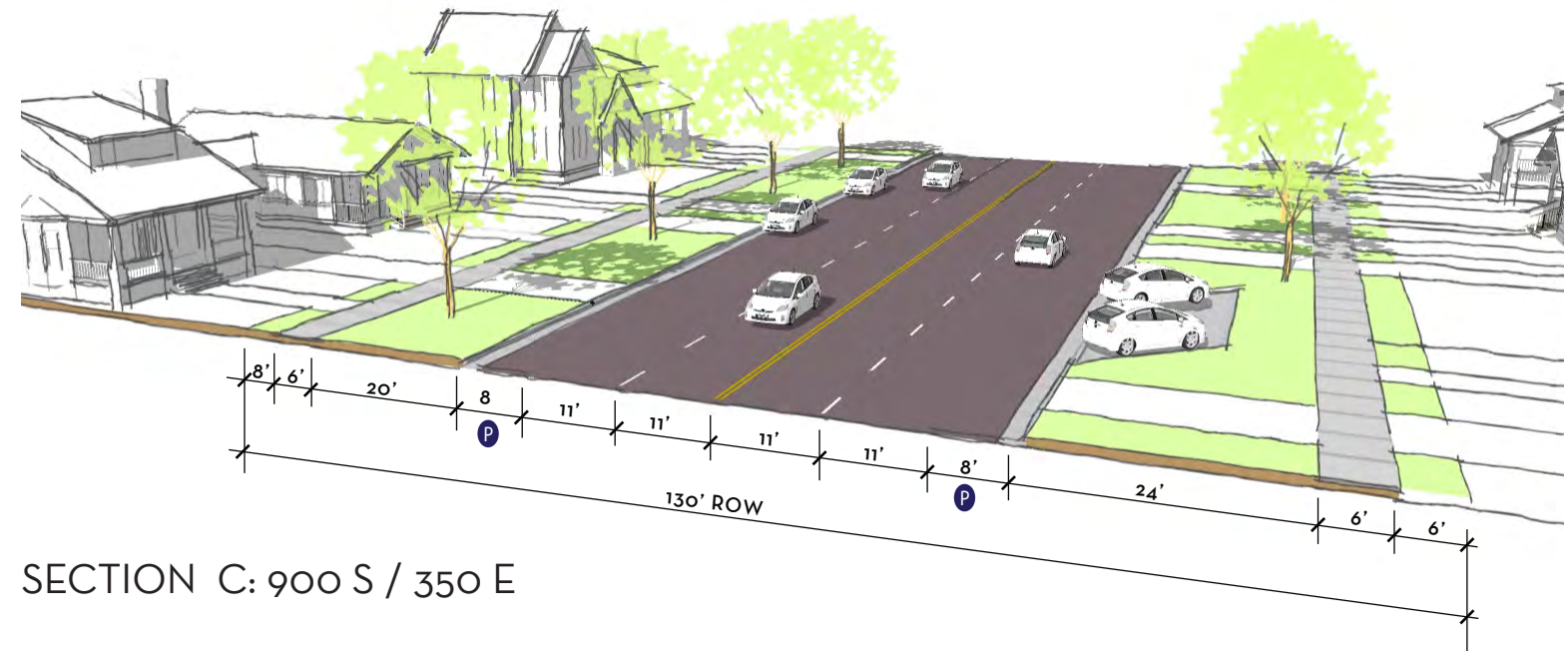
Sunnyside Avenue at Hogle Zoo, existing bike lane



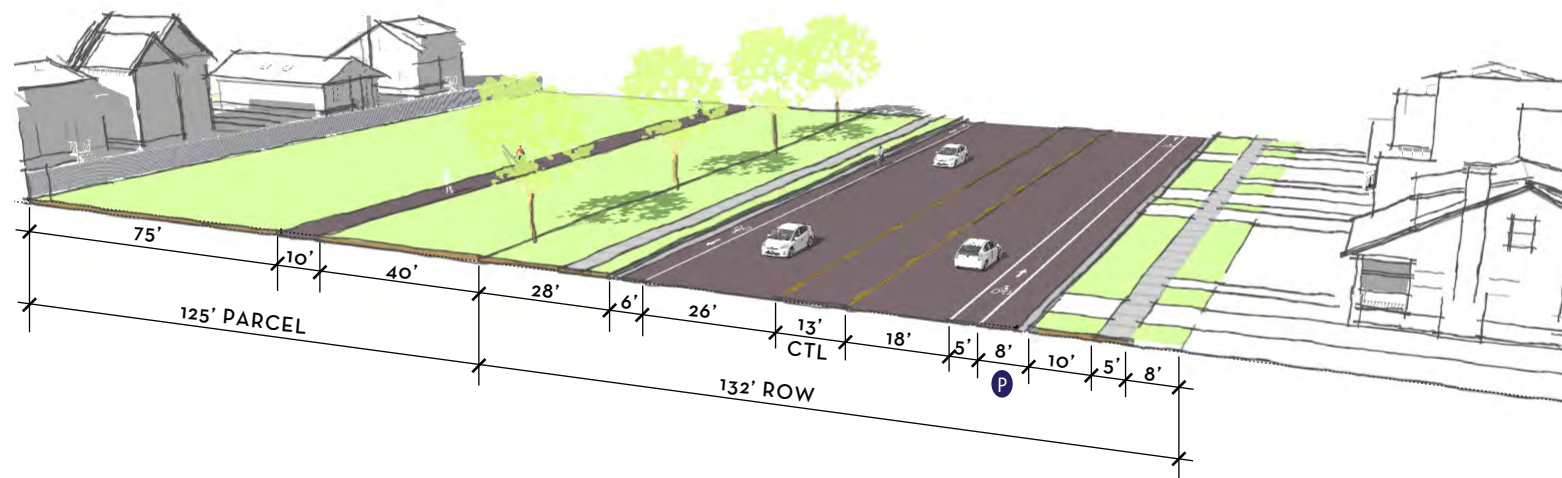
# CORRIDOR SEGMENTS & CROSS-SECTIONS



SECTION A: 9-LINE TRAIL



SECTION C: 900 S / 350 E



SECTION B: 9-LINE TRAIL / 850 W